Appendix F

King County Family Treatment Court
Outcome Evaluation
Final Report

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Outcome Evaluation of the King County Family Treatment Court
January 2011

Executive Summary

The King County Family Treatment Court (KCFTC) is an effort to address the special needs of families involved in the child welfare system due to child abuse and neglect charges related to parental substance abuse. The KCFTC was the product of over two years of planning and development, including participation in the Federal Drug Court Planning Initiative program. The goal was to create a court capable of more effectively responding to the needs of parents and children by collaborating across disciplines and working together as a non-adversarial team. There are four primary goals of the KCFTC:

1. Ensure that children have safe and permanent homes within the permanency planning guidelines or sooner;
2. Ensure that families of color have outcomes from dependency cases similar to families not of color;
3. Ensure that parents are better able to care for themselves and their children and seek resources to do so; and
4. Reduce the cost to society of dependency cases involving substances.

The KCFTC works to achieve these goals through a collaborative approach by integrating systems; promoting early and efficient intervention; providing comprehensive services; increasing judicial supervision; taking a holistic approach to strengthening family functioning; individualizing case planning and management; ensuring legal rights, advocacy, and confidentiality; reducing caseloads for DSHS caseworkers assigned to KCFTC enrolled families; regularly scheduled staffing and court reviews to improve coordination; graduated sanctions and incentives tied to treatment progress; continual measurement of program outcomes; building a collaborative, non-adversarial, cross-trained team; and active judicial leadership.

The current report presents findings from a quasi-experimental outcome study comparing 76 parents and 89 children enrolled in the King County Family Treatment Court (FTC) to a statistically matched comparison group of 182 parents and 235 children families eligible for FTC but served by the regular dependency court. Lifetime administrative data on substance use treatment and child welfare involvement was obtained from the Washington State Department of Social and Health Services. All parents who entered the FTC between March 2006 and October 2009 were included in the study.

- *FTC parents were 63% more likely to be admitted to and use treatment services than comparison group parents, with statistical significance.*
    - After the index petition was filed, 88% of FTC parents were admitted to treatment through DSHS, compared to only 54% of comparison parents.
    - Of those who received any treatment, FTC parents were more likely than comparison parents to be admitted to long-term residential treatment and/or the Recovery House, and to receive individual therapy and/or childcare services.
    - FTC parents had more treatment events from a broader service array

- *FTC parents took half as long to enter treatment, remained in treatment more than twice as long, and were 37% more likely to be successfully discharged, with statistical significance.*
    - Of those parents entering treatment who were not already in treatment at the index petition, the median average time until entry for FTC parents was 51 days, compared to 115 days for comparison parents.
    - Of those parents who entered treatment, FTC parents remained in treatment for a median average of 109 days, compared to 53 days for comparison parents.
    - Of those parents who entered treatment, 74% of FTC parents were successfully discharged, compared to only 54% of comparison parents.
- *FTC children spent a third less time in out-of-home placements and less time in the child welfare system, with statistical significance.*
    - Children whose parents were in the FTC spent a median average of 481 days in out-of-home placements, compared to 689 days for the comparison group.
    - Children whose parents were in the FTC spent a median average of 729 days between initial petition and end of child welfare supervision, compared to a median of 819 days for the comparison group.
- *At the end of the study, FTC children were 70% more likely to be permanently reunified with their parent or be on a trial home visit with their parent, with statistical significance.*
    - 58% of FTC children were returned home (returned to custody--dependency dismissed, reunified, or trial home visit) with their parent or had their dependency dismissed, compared to 34% of comparison children.
    - 21% of FTC remained in out-of-home placement, compared to 46% of comparison children.
- *Analyses of differences by race/ethnicity generally indicated that families of color in the FTC had more positive outcomes than families of color in the comparison group; there were no differences when compared with white families in FTC on most outcomes.*
    - Of those parents entering treatment who were not already in treatment at the time of the index petition, parents of color in FTC entered treatment faster (median = 51 days) than parents of color in the comparison group (81 days) and equal to white parents in FTC (49 days).
    - Children of color in the FTC group were more likely to be permanently placed than children of color in the comparison group (57% vs. 41%) and roughly equally as likely as white children in FTC (66%).
    - Children of color in FTC were more likely to be returned home (dependency dismissed, reunified, trial home visit) than children of color in the comparison group (54% vs. 35%) and roughly equally likely as white children in FTC (66%).

Collectively, these findings indicate that families in the FTC experienced significantly better substance use service outcomes and child welfare outcomes than similar parents served through the regular dependency court. Other studies nationally have linked these types of improved outcomes to significant long-term cost savings resulting from decreased child placements, less time in out-of-home care, and decreased parental recidivism in dependency court and substance use treatment. Results thus far indicate that there may be significant cost savings generated by the KCFTC.

King County Family Treatment Court Outcome Evaluation
Final Report

The King County Family Treatment Court (KCFTC) is one of a growing number of jurisdictions nationally providing an alternative to regular dependency court by addressing the needs of families involved in the child welfare system due to child abuse and neglect charges related to parental substance abuse. The KCFTC began in August 2004, after over two years of planning and development, including participation in the Federal Drug Court Planning Initiative program. The goal was to create a court capable of more effectively responding to the needs of parents and children by collaborating across disciplines and working together as a non-adversarial team. As stated in the Court's program materials, there are four primary goals of the KCFTC:

1. Ensure that children have safe and permanent homes within the permanency planning guidelines or sooner;
2. Ensure that families of color have outcomes from dependency cases similar to families not of color;
3. Ensure that parents are better able to care for themselves and their children and seek resources to do so; and
4. Reduce the cost to society of dependency cases involving substances.

To achieve these goals, the KCFTC model includes program elements that are intended to build on this promise of family treatment courts nationally. Some of these elements include:

- Judicial leadership;
- Integrated systems (e.g., integration of parental substance abuse treatment and continual review of progress within the traditional dependency court process);
- Early and efficient intervention (i.e., program eligibility determination, chemical dependency assessment, and treatment program enrollment will be completed during shelter care, when possible);
- Comprehensive services (including detoxification, inpatient services, long-term treatment, recovery house, case management, intensive outpatient, opiate substitution treatment, therapeutic child care, mental health, health, housing assistance, and other services as needed by the parent and child);
- Increased judicial supervision (e.g., case review hearings occur every other week and become less frequent as the parent progresses through the program);
- A holistic approach to strengthening family functioning;
- Individualized case planning and management;
- Ensuring legal rights, advocacy, and confidentiality;
- Reduced caseloads for DSHS case workers assigned to KCFTC-enrolled families;
- Regularly scheduled staffing and court reviews to improve coordination with the judge and among professionals serving the family;
- Graduated sanctions and incentives tied to reports of treatment progress and compliance with other court orders;
- Continual measurement of program outcomes; and,
- A collaborative, non-adversarial, cross-trained team.

Eligibility criteria for the KCFTC include the following. Parent participants must be 18 years or older, residents of King County, apply to the program within 6 months of the dependency petition (exceptions are made for cases where one parent is already in the program), voluntarily agree to participation, stipulate to a finding of dependency or have an existing dependency filing, be determined chemically dependent, be able to engage in treatment, and be willing to engage in treatment. Parents are excluded if they are a perpetrator of sexual abuse or felony child abuse, if they have a chronic or terminal medical condition or significant mental health condition that impairs their ability to meet court requirements. Participants must agree to remain drug and alcohol free, to not associate with people using drugs or alcohol, to stay out of officially designated drug areas, to willingly engage in treatment and counseling, to follow treatment plans and attend sober support meetings, and to report regularly and truthfully to the KCFTC.

A multi-component evaluation of the KCFTC is being completed. A process evaluation was completed in November of 2009 which indicated that stakeholder and participant ratings of the KCFTC were high. The current report focuses on the outcome evaluation, which is designed to assess the impact of the court on a range of key proposed outcomes of the KCFTC as compared to a similar group of non-participants. Major outcomes assessed included parental substance use treatment outcomes (e.g., entry to treatment, completion of treatment, successful discharge from treatment) and child welfare outcomes (e.g., time in out-of-home placements, placement in permanent living situations). We also aimed to learn whether families of color had outcomes similar to white families.

This outcome evaluation complements our previous process evaluation reports, which presented information about the functioning of the court from the viewpoints of court staff and participants. Results of these prior process evaluations indicated that the KCFTC stakeholders overwhelmingly believed (86% of all respondents) that the KCFTC was more successful than the regular dependency court process at achieving the above outcomes. The current evaluation compiled and analyzed administrative data for KCFTC participants as well as a statistically comparable group of regular dependency court participants to evaluate whether this positive perception of the KCFTC's impact is justified.

National Research on Drug Treatment Courts

Drug treatment courts have been in existence for approximately two decades. Drug treatment courts were created to combat the increasingly high recidivism rate of drug users and criminal offenders being sent to prison each year (Hora, 2002). According to the Office of National Drug Control Policy (2002), in 1997, 57% of state prison inmates reported using drugs one month prior to committing their offense. These and other alarming statistics prompted criminal justice officials to examine alternatives to incarceration to help rehabilitate substance abusing criminal offenders.

The first drug treatment court in the United States was established in Miami, Florida in 1989. Twenty years later, the National Criminal Justice Reference Service (2009) reported 2,018 fully functioning drug courts and 257 that are in the planning process in the United States.

Drug treatment courts have been typified by ten primary characteristics (Hora, 2002). These 10 characteristics include:

1. Integrating drug treatment services with justice system case processing,
2. Using a non-adversarial approach,
3. Identifying eligible participants early and enrolling them in the drug treatment court quickly,
4. Providing access to treatment and rehabilitation services,
5. Frequent monitoring of abstinence from drug and alcohol using urinalysis,
6. Using a coordinated strategy to govern court responses to participants' compliance,
7. Frequent and active judicial interaction with drug court participants,
8. Monitoring and evaluation of the success of program goals and effectiveness,
9. Continuous training and education of drug treatment court staff, and
10. Creating alliances between drug treatment courts and other public agencies.

Family Treatment Courts

Family Treatment Courts (FTCs) were modeled after Drug Treatment Courts; however, there are differences in both the goals and court processes of the two models. While adult drug courts seek to keep offenders free from the influence of drugs and alcohol so that they may avoid future involvement in the criminal justice system, the primary goals of FTCs are to strengthen the family, promote child health and safety, and ensure speedy and appropriate permanency planning. FTCs seek to intervene in child welfare, increase positive family functioning, and help develop a stable home environment that will allow reunification of substance abusing parents and their children. Different from regular drug treatment courts, the child welfare system is involved in the judicial process; this can include Social Workers and Court Appointed Special Advocates. As of 2009, the National Criminal Justice Reference Service reports 267 fully functioning family treatment courts and 47 that are in the planning process in the United States.

Outcomes of Family Treatment Courts

There is growing research comparing outcomes for parents in regular dependency courts to parents in FTCs. Existing research consistently finds a positive impact of FTCs. A study of four FTCs in several sites across the United States found that FTC participants enrolled in treatment more quickly, received treatment services for a longer mean duration, and were more likely to complete treatment successfully than parents in regular dependency courts (Green, et al., 2007, 2009; Worcel, et al., 2008). The study also found that FTC participants had their children placed in permanent living situations more quickly and were more likely to reach reunification with their children. Similarly, other research on FTCs has found that participants have a higher number of treatment entries, enroll in treatment earlier, spend more time in treatment, and reach reunification faster than participants in regular dependency court (Edwards, et al., 2005). Boles, Young, Moore, and DiPiroo (2007) found that families receiving FTC services had substantially higher reunification rates than families in regular dependency court. At 24 months after entry, 42% of the FTC children had reunified versus 28% of children whose parents had received standard services, and there were no differences between the groups in subsequent maltreatment reports. This suggests FTCs have a positive impact on reunification without posing additional risks of harm or neglect to children. However, none of these studies have featured random assignment into court types.

These outcomes are encouraging, and they fit with the theoretical model of change, which suggests that more timely and intensive supports, coupled with consistent oversight and appropriate sanctions, provide parents with a greater likelihood of success – and a greater chance of being reunified with their children – than regular dependency court procedures (Edwards, et al., 2005). However, few studies have examined the inner workings of FTCs and established direct connections between elements of FTCs and specific outcomes. One area that has been studied is the association between timely access to substance use treatment, successful treatment outcomes, and successful child welfare outcomes (Green, et al., 2006). In a study of over 1900 substance-abusing women who had at least one child placed in out-of home care during a six year period, researchers found that women who entered treatment faster remained in treatment longer and were more likely to successfully complete treatment, and their children spent less time out-of-home and were more likely to be reunified. Timely access to treatment may result in successful case outcomes by placing parents on a positive trajectory for behavior change.

Hypotheses

Our research questions, methods, and analytic approach were guided by pioneering evaluations of FTCs by scientists at NPC Research (Green, et al., 2009; Worcel, et al., 2008). The current study estimated the effects of the KCFTC on adult substance use treatment and child welfare outcomes. Additionally, we explored for differential effects of the KCFTC related to race/ethnicity. Our primary hypotheses were as follows:

1. When compared to comparable non-KCFTC participants, KCFTC participants will
    a. be more likely to be admitted to substance use treatment;
    b. enter treatment more quickly;
    c. be more likely to attend treatment sessions;
    d. receive more treatment events;
    e. receive a broader treatment array;
    f. remain in treatment longer; and
    g. be more likely to be successfully discharged from treatment.
2. When compared to children of comparable non-KCFTC participants, children of KCFTC participants will:
    a. spend less time in out-of-home placements;
    b. be more likely to be permanently placed; and
    c. be placed in permanent living situations more quickly.
3. Families of color in the KCFTC will have similar substance use treatment and child welfare outcomes to white families in the KCFTC, and both groups will have better outcomes than comparable non-KCFTC families of color and white families.

Method

This study used administrative data in a quasi-experimental design with statistical controls to adjust for differences in the KCFTC and comparison groups. The total parent sample size was 258. It included 76 KCFTC participants who entered the program between March 2006 and October 2009. We compared these KCFTC participants to 182 comparison group parents who were identified during this same time period through a random selection of all KCFTC-eligible parents who were referred to the KCFTC, but who were not admitted because of lack of attorney response to KCFTC inquiries (42%), over 6 months passing without a referral being made

(18%), choosing not to participate (8%), being unable to contact (7%), other issues (8%), and 17% were missing reasons.

Parents who entered the FTC prior to March 2006 were not included in the study because during this period of time the program was still developing. Data was collected in September 2010; therefore, program participants had follow-up periods ranging from 1 to 3.6 years after program entry. This study took an "intent to treat" approach—all parents ever admitted to KCFTC were included in the KCFTC group, regardless of whether the parent opted out of the program or was unsuccessful in treatment. This approach likely results in more conservative findings than if only successful graduates had been studied.

Data sources and variables

The data for this study came from three sources. The KCFTC administrative database provided names and birthdays for program participants, comparison group members, and all children involved in the case. This identifying information was shared with electronic records managers at the Washington State Division of Behavioral Health and Recovery (DBHR) and the Washington State Department of Social and Health Services Children's Administration (DSHS). Both sources provided lifetime data through September 2010. DBHR retrieved data for state-funded substance use treatment service usage, including variables such as parent demographics, admission and discharge dates, discharge status, drug of choice, treatment activities, and treatment success. Hence, data for treatment not funded by DBHR are not included in these analyses. DSHS provided information on lifetime child welfare contacts, including variables such as child demographics, child protective services referral dates, investigation findings, placement episode start and end dates, legal custody, parental visitation, and services received by parent and child. These datasets were linked through indirect identifiers and then anonymized.

Several variables used in the analyses require further description.

- *Parents of color* and *children of color* were defined as individuals which had any non-white race or Hispanic ethnicity listed in any dataset.
- The *index petition*, or the filed dependency petition that resulted in referral to the KCFTC, served as a comparable event for both groups. Because there is no comparable "KCFTC entry date" for the comparison group, the index petition date serves as the start date for time until treatment entry and other variables as indicated, even though there could be weeks or months between the index petition date and entry into the KCFTC. This approach was deemed the best alternative given the lack of a parallel "entry date" for the comparison group, though it likely resulted in more conservative findings.
- *Treatment episodes* were periods of time when a participant was admitted to a course of treatment through DSHS. Participants could have been admitted through several modalities including long term residential, intensive outpatient, outpatient, intensive inpatient, the Methadone program, the Recovery House, or housing support.
- *Treatment events* were actual events of treatment service delivery such as therapy sessions, case management sessions, urinalysis, and the like.
- *Length of time in first treatment* was defined as either the length of time between first treatment admission and discharge (for those entering a new treatment after the index petition), or as the time from index petition until treatment discharge (for those already in treatment at index petition).

- *Treatment success* was defined by treatment providers as whether a participant was discharged with a completed treatment episode rather than discharge because of withdrawing against clinical advice, violations of treatment rules such as remaining sober, or being not amenable to treatment.

Graduation status had many categories. At the time of data collection, some participants were *currently enrolled* in the KCFTC. Participants could also have *graduated*, which meant that they had six months or more consecutive clean time, the child was returned home or in a permanent placement for at least six months, they had successfully completed a certified chemical dependency treatment program, they had consistent attendance at a sober support program, they had drug free housing, any outstanding warrants were resolved, a support system was established, a relapse prevention program was established, a life plan (for employment, education, vocational training, or the like) was established, and dependency court services had been completed. Other categories included *opting out of the program*, being discharged for *non-compliance* (determined through compliance hearings and based on consistent attendance of treatment groups, completion of UA tests, treatment provider reports, participation in child visitation, and the effect of FTC responses already imposed on the participant), being discharged after *relinquishing custody* of the child, being discharged after *dependency is dismissed*, and being discharged after *termination of parental rights*.

Out-of-home placements were defined as any child placement outside of the parent's home while the child remained under court supervision, including foster care, non-parental kinship care, residential treatment, and the like. *Length of time in out-of-home placement* was defined as the total number of days in out-of-home placements any time after the index petition. *End of child welfare supervision* was defined as the day that child welfare supervision ended, which occurred for various reasons such as adoption, reunification, aging out of the system, or dependency dismissals.

This study received approval from the Institutional Review Boards of the Washington State Department of Social and Health Services and the University of Washington.

Sample

Table 1 presents the descriptive information for the parent and child samples stratified by KCFTC and comparison groups. We conducted *t*-tests and chi-square tests comparing the KCFTC and comparison groups. The groups were very similar, with no statistically significant differences in caregiver or child demographics. Both groups had similarly high rates of prior investigations completed. The KCFTC group had a significantly higher rate of DBHR substance abuse treatment prior to the index petition being filed (Comparison = 40%, KCFTC = 59%, χ^2 = 7.9, p = .005), and the KCFTC group had significantly higher rate of being in treatment at the time of the index petition (Comparison = 20%, KCFTC = 32%, χ^2 = 12.0, p < .001). Hence, the two groups were very similar in terms of demographics and previous contact with child welfare, but the KCFTC group was more likely to have previously used substance use services. This could reflect several possible underlying factors; for example, KCFTC parents could have a greater prevalence of serious substance use issues, or they could be more willing to engage with treatment.

Table 1. Parent and child descriptives and group comparisons.

Caregiver descriptives	Comparison (n = 182) % or Mean *(SD)*	KCFTC (n = 76) % or Mean *(SD)*
Caregiver age	31.2 *(7.4)*	31.1 *(6.8)*
Caregiver of color or missing	47%	42%
Caregiver white	53%	58%
Detailed caregiver race/ethnicity		
White	53%	58%
African-American	23%	18%
American Indian/Alaskan Native	14%	15%
Asian	1%	1%
Hispanic	6%	7%
Native Hawaiian/Other Pacific Islander	1%	1%
Unable to Determine	3%	0%
# of identified children	1.39 *(.82)*	1.46 *(.72)*
Type of allegations prior to index petition		
No prior allegations filed	20%	28%
Abandonment	2%	3%
Abuse	36%	33%
Medical Neglect	8%	7%
Prenatal Injury	8%	8%
Neglect	80%	71%
Any SA treatment prior to index petition*	40%	59%
In SA treatment at index petition*	20%	32%
Child descriptives	**Comparison (n = 235) % or Mean *(SD)***	**KCFTC (n = 89) % or Mean *(SD)***
Child age	4.2 *(4.7)*	3.5 *(4.3)*
Child gender		
Female	50%	54%
Male	50%	46%
Child of color	64%	61%
Child white	36%	39%
Detailed child race/ethnicity		
White	36%	39%
African-American	32%	26%
Asian/PI	4%	0%
Native American	17%	27%
Hispanic	9%	7%
Unknown	2%	1%

* χ^2 group differences, $p < .05$

Analyses. Due to possible selection bias resulting from the lack of random assignment to the KCFTC, any differences in outcomes between the KCFTC and the comparison groups could be confounded by preexisting differences between the groups. For instance, if one group is more motivated to engage in and complete treatment, or if one group has more difficulty parenting, then any outcomes due to these uncontrolled differences may be falsely attributed to treatment group. This possibility is reflected in the baseline differences between the KCFTC and the comparison groups as described above. Therefore, we used propensity score regression adjustments to reduce bias due to differences between the groups (D'Agostino, 1998; Guo, et al., 2006; Worcel, et al., 2008). We calculated propensity scores by running a logistic regression predicting the probability of KCFTC membership using variables reflecting the participant's status when the index petition was filed. These variables included caregiver age, caregiver race, child age, number of prior CPS investigations, whether the parent was in substance use treatment, number of prior substance use treatment episodes, and the caregiver's primary drug of choice. We tested these propensity scores through a method described by D'Agostino (1998), by comparing unadjusted analyses of variance (ANOVAs) predicting membership by variable, to ANOVAs after adjusting for propensity score. After adjustment, the effects of all of the variables were reduced and none of the variables were statistically significant. Hence, any possible selection bias accounted for by these variables should be significantly reduced in regression models which incorporate this propensity score as a covariate, as we did in several confirmatory models described below.

In this report, our general analytic strategy is to present all analyses without propensity score adjustment, which facilitates an understanding of the manifest differences between the groups. For the most important research questions, we completed secondary analyses while controlling for propensity score.

A variety of analyses were used to answer the research questions. Time-to-event analyses were conducted using Kaplan-Meier regressions for analyses without covariates, and Cox regressions for analyses with covariates, including propensity score. These analyses allow the inclusion of data from study participants who did not have the event occur by the end of the study window, such as examining whether the KCFTC was related to time until the end of out-of-home placements while including children who remained out-of-home by study end.

Results

KCFTC-Specific Outcomes

Time to KCFTC entry. An average of 140 days passed between the time the index petition was filed and entry into KCFTC. However, this distribution was highly positively skewed due to a few extreme outliers who took up to a year to enter the program (SD = 72, median = 121, range = 25 – 342). Several of these outliers were spouses or partners of parents who were already enrolled in the KCFTC. After referral, parents required a screening and outside documentation needed to be received by the KCFTC prior to entry. On average, it took 40 days after screening for parents to be accepted into the KCFTC (SD = 33, median = 34, range = 0 – 194).

Graduation status. The graduation status of KCFTC participants at the time of data collection is depicted in Table 2. At the time of data collection, 16 of the 76 members of the KCFTC group (22%) were still in the program. Among the 60 participants no longer in the

program, 34% had graduated from the program and an additional 9% had received a certificate of participation, which indicates substantial progress not rising to the level required for graduation. An additional 14% had opted out of the program, 29% were discharged as non-compliant, 9% were discharged after relinquishing custody, 5% were discharged after dependency was dismissed, and 2% was discharged after termination of parental rights.

Table 2. Graduation status for KCFTC participants at time of data collection.

	KCFTC (n=76)
Currently enrolled	22%
Of those out of the program (n=60)	
Graduated	34%
Certificate of participation	9%
Opted out of program	14%
Discharged	
Non-compliant	29%
Relinquished custody	9%
Dependency dismissed	5%
Termination of parental rights	2%

Predictors of KCFTC outcomes. Age of the child was related to some program outcomes for those in the KCFTC group. A logistic regression found no clear relationship between child age and the likelihood that they would be discharged from child welfare ($\chi^2 = 2.36$, $p = .127$). However, a Cox regression revealed that younger children spent less time in out-of-home placements than older children ($\chi^2 = 7.6$, $OR_{age} = .418$, $p = .006$) and ended their involvement with the child welfare system more quickly ($\chi^2 = 7.1$, $OR_{age} = .389$, $p = .008$). There were no clear relationships between child age and the type of placement the child was in at the end of the study.

Substance Abuse Treatment Outcomes

We hypothesized that parents in the KCFTC group would have better treatment-related outcomes than parents in the comparison group, both before and after statistically controlling for propensity score. These outcomes included likelihood of treatment entry, speed of treatment entry, attendance at treatment sessions, length of treatment, and success at completion of treatment.

Likelihood of treatment admission. Chi-square analyses of unadjusted data revealed that parents in the KCFTC were 1.6 times more likely than comparison parents to be admitted to any form of substance use treatment (88% vs. 54%, $\chi^2 = 27.4$, $p < .001$). A logistic regression predicting admission to treatment after controlling for propensity score confirmed this finding (model χ^2 change = 20.3, $p < .001$).

Time until treatment admission. Because some parents were already in treatment at the time of the index petition, we analyzed time until treatment entry in two ways. First, we examined time until treatment including those who were already in treatment as having 0 days between petition and treatment entry. Second, we examined time until treatment only including those parents who entered treatment and who were not already in treatment at the index petition. Kaplan-Meier analyses of unadjusted data while including all parents in the analysis revealed that parents in KCFTC entered treatment more quickly, log-rank $\chi^2 = 45.3$, $p < .001$ (see Figure 1). The median number of days until treatment entry for the KCFTC group was 36, compared to 371 days for the comparison group. Kaplan-Meier analyses of unadjusted data while including parents who were not in treatment at entry and who entered treatment after the index petition also found that KCFTC parents entered treatment more quickly, log-rank $\chi^2 = 12.6$, $p < .001$ (see Figure 2). The median days until treatment for the KCFTC group was 51, compared to 115 for the comparison group. These findings were confirmed through Cox regressions adjusting for propensity score. Cox regression for all parents in the study, including those who were already in treatment, was also significant after controlling for propensity score, model χ^2 change = 10.7, $p < .001$. On any average day, the odds that KCFTC parents would enter treatment were 1.8 times higher than the comparison group, 95% *OR* = 1.3, 2.6. The Cox regression which only included parents who entered treatment and who were not in treatment at the index petition, controlling for propensity score, was also significant, model χ^2 change = 10.9, $p < .001$.

Figure 1. Kaplan-Meier survival analysis of days until treatment entry for all parents.

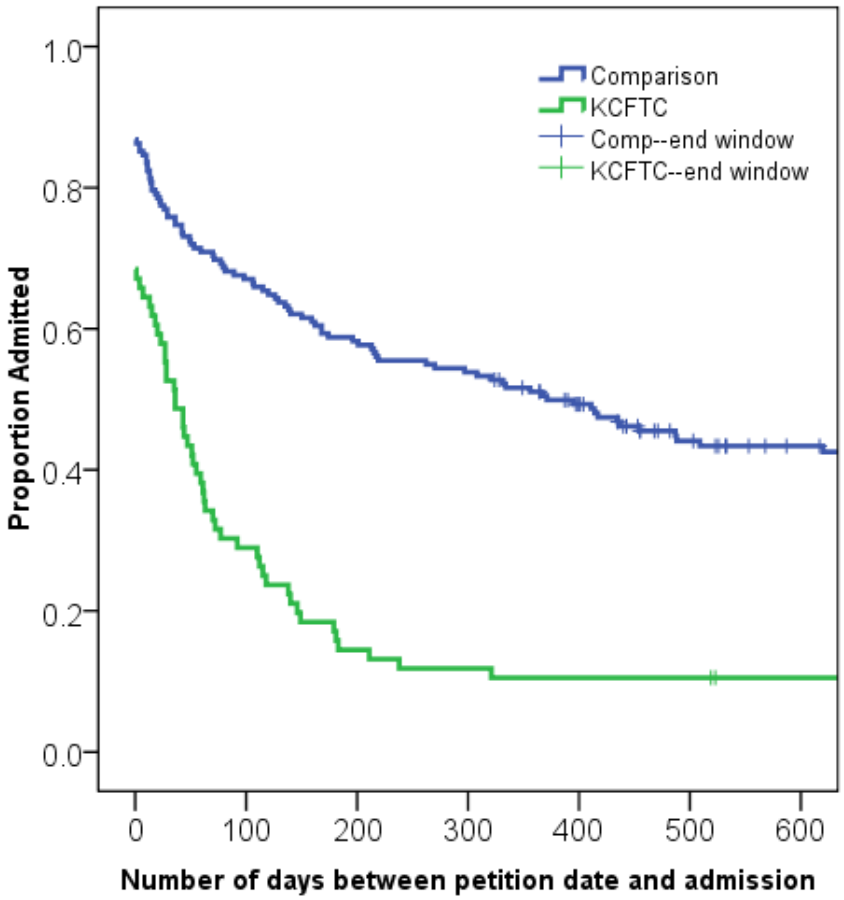
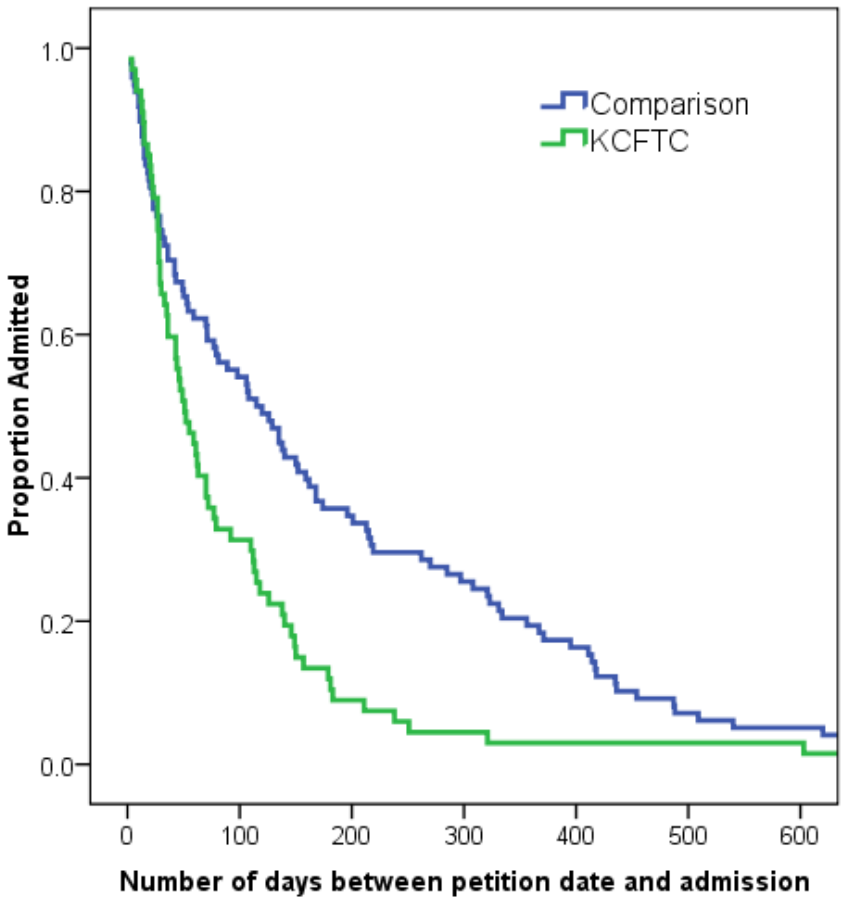


Figure 2. Kaplan-Meier survival analysis of days until treatment entry for parents who entered treatment and who were not in treatment at index petition.



Treatment event types, amount, attendance, and discharge. For the following analyses, we only include the parents who were admitted to or received treatment. Because the KCFTC group was much more likely to receive treatment of any kind, all of these analyses represent a conservative estimate of the impact of the KCFTC on receipt of substance use treatment. Table 3 displays the types of treatment admission modalities and treatment activities received by parents after the index petition. Cross-tabulations with chi-square tests revealed that parents in the KCFTC group were 1.6 times more likely to be admitted to long term residential treatment (65% vs. 40%, $\chi^2 = 9.7$, $p = .002$) and significantly more like to be admitted to the recovery house (9% vs. 1%, $\chi^2 = 6.5$, $p = .011$) . Parents in the KCFTC group were also more likely to receive individual therapy and childcare. Parents in the KCFTC group also had more treatment, and more different types of treatment. Of those parents who had any type of treatment after the index petition was filed, the KCFTC parents had an average of 145 treatment events (*SD* = 152), compared to an average of 65 (*SD* = 63) for the comparison parents, $t(77) = -3.9$, $p < .001$. Of the seven different types of treatment event activities, KCFTC parents experienced significantly more than the comparison group (mean = 3.9 vs. 3.3, $t(156) = -3.12$). Additionally, parents in the KCFTC were significantly more likely to attend treatment. KCFTC parents attended an average of 91% of all of the treatment events which were scheduled, compared to 84% of the comparison

group, $t(148.7) = -2.5$, $p = .014$; and the standard deviations for these mean scores indicated that the group of parents in the KCFTC group more uniformly attended treatment ($SD = 11$ vs. 21, Levene's $F = 12.6$, $p < .001$). Finally, KCFTC parents were more likely to be successfully discharged from at least one treatment episode. Of those who entered treatment, KCFTC parents were 1.4 times more likely to be considered by their treatment provider to have a "successful" discharge, compared to the comparison parents, 74% vs. 54%, $\chi^2 = 6.8$, $p = .008$). A logistic regression controlling for propensity score verified this finding (model χ^2 change = 6.4, $p = .012$, OR = 2.4, 95% OR = 1.2, 4.8).

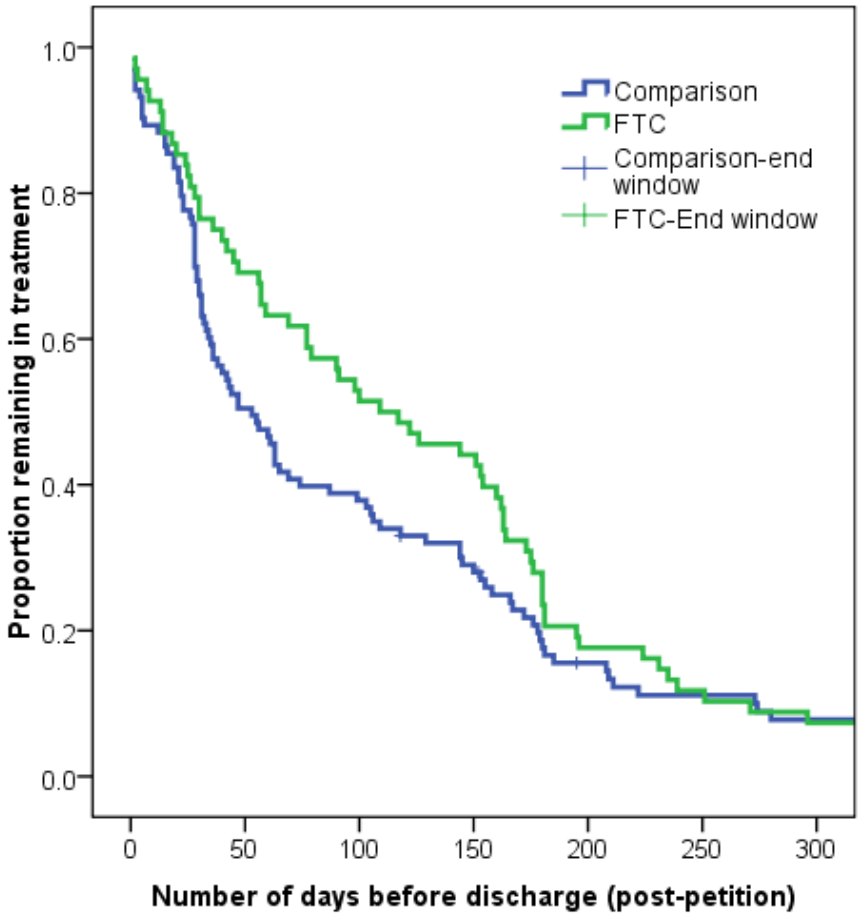
Table 3. Types of treatment received post-index petition of those who received any treatment.

Treatment admission modality—any received	Comparison ($n = 94$)	KCFTC ($n = 66$)
Long term residential*	40%	65%
Intensive outpatient	52%	56%
Outpatient	43%	50%
Intensive inpatient	40%	35%
Methadone	17%	27%
Recovery House*	1%	9%
Housing support	8%	3%
Treatment event activity—any received	**Comparison ($n = 94$)**	**KCFTC ($n = 64$)**
Individual therapy*	89%	100%
Group therapy	90%	97%
Case management	81%	89%
Urinalysis	43%	52%
Methadone/opiate substitution	15%	25%
Childcare*	11%	25%
Acupuncture	1%	5%

* χ^2 group differences, $p < .05$

Length of time in treatment. Kaplan-Meier analyses of length of time in first treatment post-petition, when only considering those who were in treatment at any time post-petition, indicated that KCFTC parents remained in treatment longer, see Figure 3 (Breslow $\chi^2 = 4.18$, $p = .04$). After adjusting for propensity score, however, Cox regression analyses were not significant (model χ^2 change = 1.83, $p = .177$), though the odds ratio was in the predicted direction (OR = .8, 95% CI = .58, 1.1). Therefore, much of the relationship between the KCFTC and length of time in treatment was erased after controlling for propensity to enter the KCFTC, and any remaining relationship was too weak to be statistically significant.

Figure 3. Kaplan-Meier survival analysis of length of time in treatment.

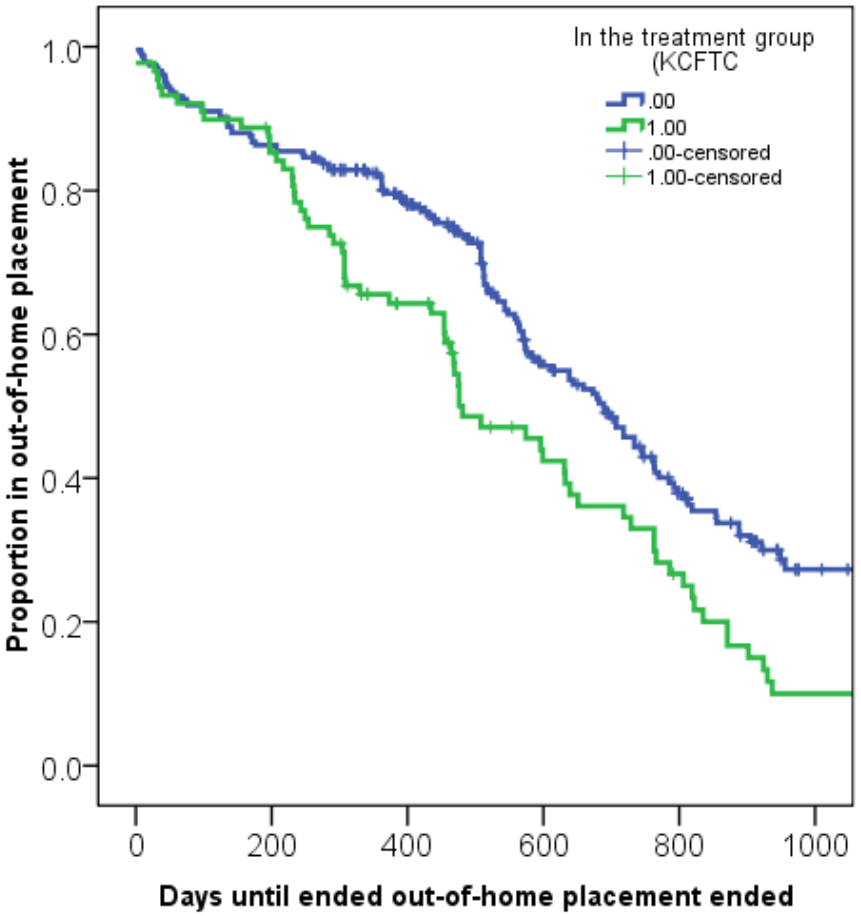


C

Child Welfare Outcomes

Length of time in out-of-home placements. Kaplan-Meier analyses revealed that children whose parents were in the KCFTC group were in out-of-home placements for less time before returning home (defined as returning home for a trial home visit or being discharged from child welfare), log rank $\chi^2 = 12.0$, $p < .001$ (see Figure 4). The median number of days until out-of-home placements ended were 481 for the KCFTC group and 689 for the comparison group. These findings were replicated using Cox regression analyses controlling for propensity score. On any average day after the index petition, children whose parents were in the KCFTC group had an odds of ending their out-of-home placement that was 1.6 times greater than the comparison group (95% OR = 1.2, 2.2).

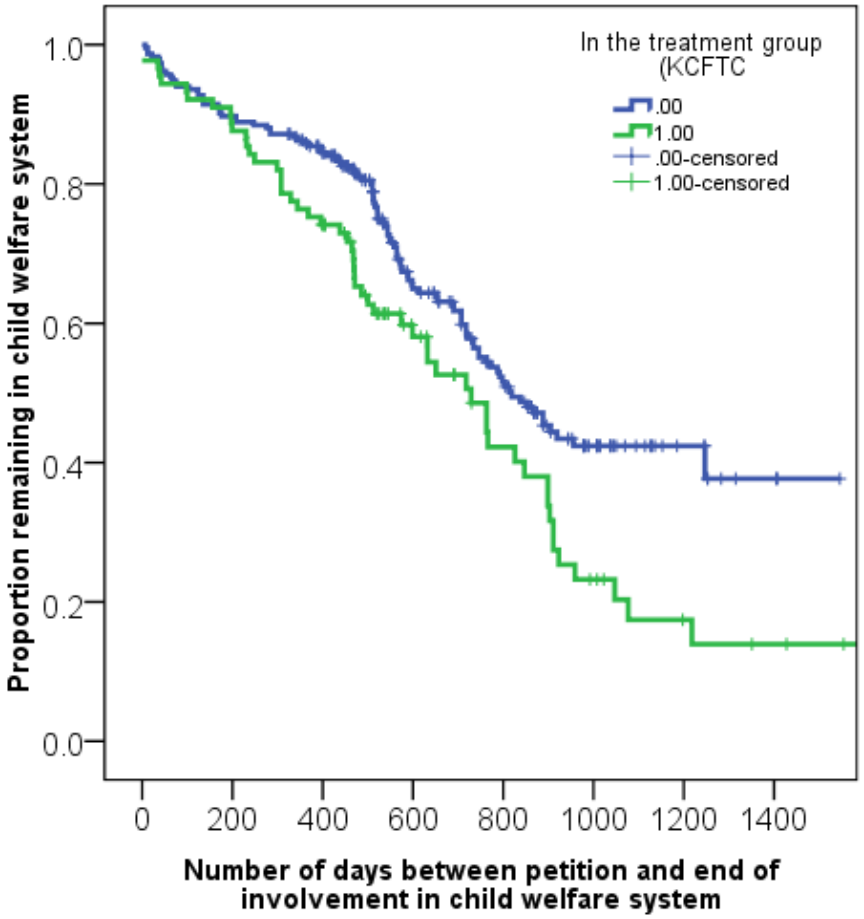
Figure 4. Kaplan-Meier analysis of length of time until out-of-home placement ended



Relative placements/kinship care. There were no statistically significant differences between the KCFTC group and the comparison group in terms of likelihood to be placed in kinship care while under court supervision, whether it was defined as any out-of-home stay with relatives (57% vs. 59%, respectively), the overall percentage of out-of-home placements with relatives (44% vs. 43%), or the total percentage of out-of-home days placed with relatives (46% vs. 46%).

Length of time until end of child welfare supervision. By the end of the study period, children in the KCFTC group were 1.4 times more likely to no longer be in the child welfare system (i.e. "permanently placed" or aged out of the system) than children in the comparison group (62% vs. 44%, $\chi^2 = 7.9$, $p = .005$). Kaplan-Meier analysis revealed that children in KCFTC spent less time in the child welfare system than comparison children, with a median of 729 days between initial petition and end of supervision, compared to a median of 819 days for the comparison group, log-rank $\chi^2 = 8.0$, $p = .005$ (see Figure 5). This was confirmed through Cox regression analyses controlling for propensity score (model χ^2 change = 7.0, $p = .008$); on any average day after the index petition, the odds that children whose parents were in KCFTC would end child welfare supervision were 1.6 times higher than the comparison group.

Figure 5. Kaplan-Meier analysis of length of time until child's end of involvement in the child welfare system



Placement types at end of study and reunifications. Table 4 depicts the placement status for all identified children at the end of the study. With statistical significance, children with parents in KCFTC were 2 times more likely to be returned to the custody of their guardian (dependency dismissed; 30% vs. 15%, $\chi^2 = 10.6$, $p < .001$), were half as likely remain in an out-of-home placement at the end of the study period (21% vs. 46%, $\chi^2 = 16.4$, $p < .001$), and, with borderline significance, were more likely to be on a trial home visit (17% vs. 10%, $\chi^2 = 3.1$, $p =$

.078). All other categories are depicted in Table 4. Children whose parents were in KCFTC were 1.7 times more likely to be returned home (58% vs. 34%, $\chi^2 = 16.5$, $p < .001$), which represents a combined category of reunifications, returns to custody of guardian—dependency dismissed, and trial home visits.

Table 4. Placement outcomes for all identified children at the end of the study.

	Comparison ($n = 235$)	KCFTC ($n = 89$)
Returned to custody of guardian—dependency dismissed*	15%	30%
Adoption	14%	18%
Trial home visit	10%	17%
Reunification	9%	11%
Guardianship	4%	1%
Transition to adulthood/emancipation	2%	1%
State transfer to other authority	0.4%	0%
In out-of-home placement at end of study*	46%	21%

* χ^2 group differences, $p < .05$

Outcomes for Families of Color

We explored whether there were differential outcomes (parental chemical dependency treatment and child welfare outcomes) for families of color when compared to white families. Since there were four groups (families of color in KCFTC, families of color in comparison, white families in KCFTC, white families in comparison) there were several possible combinations of groups for testing differences. However, we were particularly interested in two general types of possible differences for every outcome variable:

1. First, we examined whether families of color in the FTC had improved outcomes when compared to families of color in the regular dependency court;
2. Second, we focused on differences between families of color and white families in the FTC.

When examining outcomes for both court type and race, the numbers of people for whom we have data is dramatically reduced for any single analyses; hence, our statistical power to detect differences was reduced. Therefore, small effects would not be deemed statistically significant. Generally, analyses described below include 31 (12% of total) KCFTC parents of color, 45 (17%) KCFTC white parents, 80 (31%) comparison parents of color, and 102 (40%) comparison white parents.

KCFTC-specific outcomes. There were no statistically significant differences between parents of color (POC) and white parents (WP) in length of time from when the index petition was filed until entry into the FTC (WP = 137, POC = 145, $t(73) = -.42$, $p = .674$), and there were no differences in length of time from screening to acceptance (WP = 37 days, POC = 44 days, $t(73) = -1.2$, $p = .225$). There were no statistically significant differences between parents of color and white parents on their graduation status, as depicted in Table 5.

Table 5. Graduation status for KCFTC participants at time of data collection, stratified by race.

	Parents of color (n=31)	White parents (n=45)
Graduated	29%	24%
Certificate of participation	10%	4%
Opted out of program	13%	9%
Discharged		
Non-compliant	16%	27%
Relinquished custody	7%	7%
Dependency dismissed	3%	4%
Termination of parental rights	3%	0
Currently enrolled	19%	24%

Note. No statistically significant differences between groups.

Likelihood of treatment admission. Table 6 displays summary data by group for a variety of outcomes discussed below. Both parents of color and white parents in the FTC were significantly more likely to be admitted to treatment than the comparison group (FTC WP = 87%, comparison WP = 52%, FTC POC = 90%, comparison POC = 56%; $\chi_{WP}^2 = 13.9$, $p < .001$; $\chi_{POC}^2 = 8.0$, $p = .005$). However, there were no statistically significant differences between parents of color and white parents in the KCFTC, and no differences between parents of color and white parents in the comparison group. A logistic regression predicting treatment admission while controlling for propensity to enter the FTC confirmed this finding (as described above) but race was not statistically significant, and a race x group interaction (to explore potentially differential effects of the FTC) was also not significant.

Table 6. Outcomes stratified by court type and race.

	Comparison		KCFTC	
	Parent/child of color	White parent/child	Parent/child of color	White parent/child
Admitted to treatment[1,2]	56%	52%	90%	87%
Median # days until treatment entry[1,2]	215	487	28	43
Mean # of treatment events[1,2]	60	71	145	143
Mean % of treatment events attended	82%	86%	91%	91%
Successfully completed at least one treatment episode (of those who entered)[1]	55%	52%	82%	68%
Median # days in first treatment episode[2]	43	53	77	151
Median # days in out-of-home placement[2]	718	575	596	469
Out of child welfare system by end of study[1,2]	41%	45%	57%	66%
Median# days until leaving child welfare system[1,2]	866	688	763	632

Note. $p < .05$ for pairwise comparisons: [1]POC-POC, [2]White-white, [3]KCFTC-KCFTC

Time until treatment entry. We conducted Kaplan-Meier analyses with pairwise statistical tests for each pair of the four groups. We found that parents of color in the KCFTC entered treatment significantly faster than parents of color in the comparison group (log-rank $\chi^2 = 16.2$, $p < .001$) but did not significantly differ from white parents in the KCFTC (log-rank $\chi^2 = .543$, $p = .461$). Parents of color in the KCFTC entered treatment within a median of 28 days, compared to 43 days for white parents in the KCFTC, 215 days for comparison parents of color, and 487 days for comparison white parents.

Treatment event types, amount, attendance, and discharge. The following analyses only include those parents who received substance use treatment. A one-way ANOVA with

Tamhane's post-hoc tests (to account for unequal variances among the groups) indicated that parents of color in the KCFTC had significantly more treatment events than parents of color in the comparison group, but there were no differences between parents of color in KCFTC and white parents in KCFTC ($F = 6.73$, $p < .001$). Parents of color in the KCFTC had 145 treatment events, compared to 143 for white parents in the KCFTC, 60 for comparison parents of color, and 71 for comparison white parents. There were no statistically significant differences between the groups on the percentage of treatment sessions that parents attended (as compared to no-shows or excused absences), though because this analysis only includes those people who received services, the sample sizes for each group are small enough to reduce our statistical power to detect differences (KCFTC POC = 91%, KCFTC WP = 91%, Comparison POC = 82%, Comparison WP = 86%; $F = 1.9$, $p = .124$). Finally, parents of color in the KCFTC were significantly more likely than parents of color in the comparison group, and equally likely as white parents in the KCFTC, to successfully complete at least one treatment episode (KCFTC POC = 82%, KCFTC WP = 68%, Comparison POC = 55%, Comparison WP = 52%; χ^2 POC-POC = 6.9, $p = .009$).

Length of time in treatment. Kaplan-Meier analyses of length of time in first treatment post-petition, when only considering those who were in treatment at any time post-petition, indicated no significant differences between white parents and parents of color in the KCFTC, and no other comparisons were statistically significant, see Table 6 (Median days KCFTC POC = 77, KCFTC WP = 151, Comparison POC = 43, Comparison WP = 53; Breslow $\chi^2 = 4.61$, $p = .03$).

Length of time in out-of-home placements. Kaplan-Meier analyses revealed that white children whose parents were in the KCFTC group were in out-of-home placements for significantly fewer days than white children whose parents were in the comparison group, see Table 6 (KCFTC COC = 596, KCFTC WC = 496, Comparison COC = 718, Comparison WC = 575; log rank $\chi^2 = 10.2$, $p = .001$). There were no significant differences between white children and children of color in the KCFTC, and no other differences were statistically significant.

Length of time until end of child welfare supervision. By the end of the study period, white children and children of color in the KCFTC were both significantly more likely to have left the child welfare system and be permanently placed than their respective children in the comparison group, see Table 6 (KCFTC COC = 57%, KCFTC WC = 66%, Comparison COC = 41%, Comparison WC = 45%; $\chi^2 = 9.8$, $p < .02$). Kaplan-Meier analyses revealed that white children and children of color whose parents were in KCFTC spent less time than their respective counterparts in the comparison group (KCFTC COC = 763, KCFTC WC = 632, Comparison COC = 866, Comparison WC = 688; log rank $\chi^2 = 11.1$, $p = .011$). There were no significant differences between white children and children of color in the KCFTC, and no other differences were statistically significant.

Placement types at end of study and reunifications. Table 7 depicts the placement status for children in the study, stratifying by court type and race. White children in the KCFTC were significantly more likely than white children in the comparison group to be returned to custody, to be adopted, and to be on a trial home visit, and were significantly less likely to remain in an out-of-home placement at the end of the study ($\chi^2 = 20.7$, $p = .008$). Children of color in the

KCFTC, with borderline significance, were more likely than children of color in the comparison group to be returned to custody and to be adopted ($\chi^2 = 11.4$, $p = .078$), and were significantly less likely to be in an out-of-home placement ($\chi^2 = 5.6$, $p = .018$). Children of color in the KCFTC were 1.5 times more likely to be returned home (combining reunifications, returns to custody, and trial home visits) than children of color in the comparison group ($\chi^2 = 5.6$, $p = .018$). White children in the KCFTC were 2.5 times more likely to be returned home than white children in the comparison group ($\chi^2 = 12.7$, $p < .001$). There were no significant differences between white children and children of color in the KCFTC in likelihood to return home.

Table 7. Placement outcomes at the end of the study window stratified by court type and race.

	Comparison		KCFTC	
	Child of color	White	Child of color	White
Returned to custody —dep. dismissed	13%	18%	26%	37%
Adoption	13%	15%	17%	20%
Trial home visit	12%	6%	13%	23%
Reunification	11%	7%	15%	6%
Guardianship	4%	5%	0	3%
Transition to adulthood/emancipation	1%	4%	2%	0
State transfer to other authority	0	1%	0	0
In out-of-home placement at end of study[3]	47%	45%	23%	11%

Note. χ^2 group differences, $p < .05$ for White-white pairwise comparison, $p < .10$ for COC-COC pairwise comparison, no other significant differences.

Discussion

Past research has demonstrated positive outcomes of family treatment drug courts nationally for parents and children involved in the child welfare system due to allegations of abuse and neglect stemming from parental substance abuse. However, there is only a small number of controlled studies examining the benefits of these courts. Moreover, these specialty courts have only been in operation for 20 years, and research indicates substantial variation in program model and model adherence from court to court. Thus, local FTC initiatives should conduct their own process and outcomes evaluations to ensure that programs are being implemented as intended; being viewed positively by staff, stakeholders, and participants; achieving positive outcomes; and generating fiscal benefits by reducing costs of negative outcomes (such as out-of-home placement or extended stays in the child welfare system) that offset the costs of managing the FTC program itself.

Previous process evaluations (2006, 2008) of the King County Family Treatment Court have indicated good adherence to the program model, in that staff, stakeholders, and participants view core components of the program as being fairly to very well implemented. Examples of these components include comprehensive, strengths-based assessments; high-quality wraparound care planning; consistent incentives and sanctions; random UA screens; effective and active judicial interaction; communication across stakeholders; and availability of high-quality substance abuse services. In 2008, 70% percent of staff and stakeholders interviewed gave the court the highest possible ratings of success in accomplishing its goals, and 61% gave the Court the highest possible ratings for its success in achieving outcomes when compared to the regular dependency court. Participating parents reported high or very high ratings of the quality of the relationship they had with the Court, child welfare, and treatment counselors, and high ratings of the effectiveness of the services and supports of the Court in the treatment process. Moreover, ratings of stakeholders and participants were found to be increasing over time.

Building on previous process evaluations, the current study evaluated whether families enrolled in the King County Family Treatment Court experienced better outcomes than a comparable group of parents and children who participated in the regular dependency court. Key outcomes of interest included substance abuse treatment outcomes for parents (e.g., receipt of and successful completion of treatment, efficiency of entry to treatment, and session attendance) and child welfare outcomes for children and youth (e.g., number of days in out-of-home placement, reunification with parents, and length of time until discharge from supervision by the child welfare system). We also were interested in examining whether outcomes for KCFTC participants differed by race/ethnicity.

Overall, the results overwhelmingly favored the KCFTC in both of these primary outcome domains – parental treatment and child welfare. Moreover, these positive outcomes were found for both children and parents of color as well as white children and parents.

- **KCFTC parents were more likely to be admitted to and use treatment services than comparison group parents, with statistical significance.**
    - After the index petition was filed, 88% of KCFTC parents were admitted to treatment through DSHS, compared to only 54% of comparison parents.

- Of those who received any treatment, KCFTC parents were more likely than comparison parents to be admitted to long-term residential treatment and/or the Recovery House, and to receive individual therapy and/or childcare services.
- KCFTC parents had more treatment events from a broader service array

- **KCFTC parents entered treatment faster, remained in treatment longer, and were more likely to be successfully discharged, with statistical significance.**
  - Of those parents entering treatment who were not already in treatment at the index petition, the median average time until entry for KCFTC parents was 51 days, compared to 115 days for comparison parents.
  - Of those parents who entered treatment, KCFTC parents remained in treatment for a median average of 109 days, compared to 53 days for comparison parents.
  - Of those parents who entered treatment, 74% of KCFTC parents were successfully discharged, compared to only 54% of comparison parents.
- **KCFTC children spent less time in out-of-home placements and less time in the child welfare system, with statistical significance.**
  - Children whose parents were in the KCFTC spent a median average of 481 days in out-of-home placements, compared to 689 days for the comparison group.
  - Children whose parents were in the KCFTC spent a median average of 729 days between initial petition and end of child welfare supervision, compared to a median of 819 days for the comparison group.
- **At the end of the study, KCFTC children were more likely to be permanently reunified with their parent or be on a trial home visit with their parent, with statistical significance.**
  - 58% of KCFTC children were returned home (returned to custody--dependency dismissed, reunified, or trial home visit) with their parent or had their dependency dismissed, compared to 34% of comparison children.
  - 21% of KCFTC remained in out-of-home placement, compared to 46% of comparison children.
- **Analyses of differences by race/ethnicity generally indicated that families of color in the KCFTC had more positive outcomes than families of color in the comparison group; comparisons with white families in KCFTC generally found similar outcomes for the two racial groups.**
  - Of those parents entering treatment who were not already in treatment at the time of the index petition, parents of color in KCFTC entered treatment faster (median = 51 days) than parents of color in the comparison group (81 days) and equal to white parents in KCFTC (49 days).
  - Children of color in the KCFTC group were more likely to be permanently placed than children of color in the comparison group (57% vs. 41%) and roughly equally as likely as white children in KCFTC (66%).
  - Children of color in KCFTC were more likely to be returned home (dependency dismissed, reunified, trial home visit) than children of color in the comparison group (54% vs. 35%) and roughly equally likely as white children in KCFTC (66%).

Cost-benefit Analyses

The implications of the above findings for cost savings to public systems are substantial. KCFTC children spent a third less time in out-of-home placements, less time in the child welfare system, and were 70% more likely to be returned home. Although formal cost-benefit analysis has not yet been conducted with the King County FTC, the similarity of court processes – and results – suggest that long-term cost savings found in previous research is likely also being achieved by the KCFTC, in areas such as:

- Decreased foster care days;
- Decreased caseworker time;
- Decreased arrests;
- Decreased court hearings;
- Decreased prison/jail time;
- Decreased probation/parole days;
- Decreased substance use treatment;
- Decreased healthcare (especially urgent/emergency care);
- Decreased public housing usage;
- Decreased drug-addicted babies born; and
- Decreases in other publicly funded expenditures.

NPC Research, the most active evaluators of FTCs and drug treatment courts, has completed several cost-benefit analyses at sites across the nation. The table below summarizes their findings:

Location	Cost savings per participant	Return on investment	Areas of savings[1]
Harford Co., MD	$12,000 over 1 year	350%	Foster care days, Criminal justice, Court Cases
Jackson Co., OR	$5,593 over 4 years	106%	Foster care days, Probation/Parole, Court Cases
CA "Court 1"	$1,657 over 4 years	130%	Not provided
CA "Court 2"	$2,141 over 5 years	Not provided	Not provided
Baltimore, MD	$5,022 over 1 year	Not provided	Foster care days (did not examine other areas)

The general approach of all of these courts was the same as the King County FTC: Frequent judicial monitoring, comprehensive and individualized services and support, collaboration across agencies, intensive supervision, and increased treatment support. In each cost-benefit evaluation depicted, cost savings were realized in several areas, with the bulk of savings in foster care days, but large savings were also found from long-term decreases in prison and jail time, court hearings, probation and parole, and treatment services.

We cannot know for certain whether these findings generalize to the King County FTC. However, several factors support the assumption that the KCFTC is achieving similar cost savings:

- The findings of cost savings have consistently been replicated in multiple national studies.
- National sites are very similar to the King County FTC in approach and outcome.

[1] For full reports, see www.npcresearch.com

- The evaluation of the King County FTC found that the median number of days children remained in an expensive sector of care, out-of-home placements, was 208 days less for FTC children than comparison children. Given that annual foster care cost estimates range from $21,000 to $52,000 (depending on the state and the nature of calculations,) and that other types of residential placement costs are much higher, we can assume substantial cost savings of KCFTC from reduction in out-of-home placement costs alone.[2]
- We found that FTC parents were 37% more likely to be successfully discharged from substance use treatment. Successful completion is likely related to decreases in the significant costs related to future arrests, child welfare referrals, court time, future substance abuse treatment, and related areas.

Limitations

The primary limitation of the current study is that it was not a randomized study. We relied on existing administrative datasets and statistical adjustment of group differences at baseline rather than randomization to a treatment (KCFTC) vs. control group (regular dependency court). We used propensity score modification in order to reduce potential bias in effects by controlling for factors likely related to enrollment in KCFTC, and we adjusted statistically for variables that were found to be related to outcomes. However, it may be that group status (enrollment in KCFTC vs. the regular dependency court) and outcomes (i.e., treatment and child welfare outcomes) are not conditionally independent after controlling for the propensity score. Unfortunately, there is no empirical test of this assumption. This potential problem is inherent to use of the propensity score methodology. However, it remains a rigorous method to demonstrate treatment effects for quasi-experimental research (D'Agostino, 1998; Guo, et al., 2006).

Moreover, in this study, several factors suggest that the differences found between the two groups are not due to confounding effects and/or unmeasured variables that may be independently accounting for the differences that were found. First, discussion with Court officials suggest that the primary drivers of KCFTC referral and enrollment – e.g., attorney attitudes and/or knowledge about the Court – are likely independent of the outcomes that were measured. Second, even before statistical adjustment via propensity score methods, we found relatively few differences between KCFTC enrolled parents and children and regular dependency court participants who were flagged in the referral database from which we derived the comparison group. Finally, for those few differences that were found, propensity score adjustment successfully reduced or practically eliminated bias for the included covariates.

Some of the analyses were conducted using the index petition as the "start date." This was done because there was no comparable "KCFTC entry date" for the comparison group, even though there may be weeks or months between the index petition date and entry into the KCFTC. As a result, some events may have occurred prior to the official entry into the KCFTC, such as entry into substance use treatment services. This approach was deemed the best alternative given the lack of a parallel "entry date" for the comparison group, though it likely resulted in more conservative findings.

[2] E.g., Dunlap, 2009; http://www.platteinstitute.org/docLib/20100405_FINAL_-_Foster_Care_Study.pdf

This study used an "intent to treat" approach, meaning that participants who dropped out of the KCFTC group remained in the analysis as KCFTC group members. Though we have yet to examine the mechanisms related to successful outcomes, it is likely that those who dropped out had worse outcomes. Therefore, this study may underestimate the true beneficial effects of being served by the KCFTC.

Conclusion

Overall, the current evaluation supports the perspectives of court staff, stakeholders, and participants that the King County FTC is capable of successfully implementing its mission to (1) facilitate connections to substance abuse treatment, (2) better meet the needs of participating children and families, and (3) achieve more positive child welfare outcomes, including speed to permanency and case closure, increased rates of reunification, and reduction in reliance on out-of-home placements. Outcomes found in this evaluation study closely resemble those found in those few previous studies that have been cited widely as support for the promise of the family treatment drug court model.

In the current era of budgetary constraints, it is recognized that the additional costs of specialty courts such as KCFTC invite scrutiny as policy makers struggle to balance human services budgets. The current study results suggest, however, that reductions in the numbers of families served by KCFTC (or budget reductions that might negatively affect program operations) will likely result in significant additional costs elsewhere in the child- and family-serving system. Our analyses of data related to the KCFTC thus far, coupled with cost-benefit analyses conducted at similar sites across the nation, suggest that there may be significant cost savings generated by the King County Family Treatment Court.

Over the next several months, researchers at UW will work with court officials to conduct a more thorough accounting of cost savings that result from the positive outcomes achieved by the KCFTC, to shed light on this issue. The research team will also continue to analyze data from the current study to illuminate what aspects of KCFTC functioning may be most important to achieving the positive outcomes found here. Such information will be vital to informing future KCFTC program operations, and will also help inform the work of Courts and similar programs across the country.

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